Kazak

*563 The Kazakhs are
361
231 pastoral nomads, herding sheep, goats, horned cattle,
342 horses, and camels. Felt tents are used in the summer, but
221 most Kazakhs live in mud huts in the winter or, in mountain
[436] country, in log cabins. Sheep and goats are the economic staple
[262] and serve as the units of exchange value. Poorer people live more
on milk and cheese than on mutton; wealthier herd-owners eat
[291] more mutton. Sheepskins, tanned with the wool on them, are used
for clothing; cotton textiles, used for lighter clothing or as a fac-
ing for the skin clothing, are acquired in trade. Felted wool is
[825] used to cover the round, conical-roofed tents. The horse, formerly
important in war, is honored in Kazakh folklore for its beauty,
[276] bravery, and faithfulness. In modern times the wealthy keep herds
of mares in order to be able to drink *kumis*, made by fermenting
mare's milk.

*563 Like all pastoral nomads of Inner Asia, the Kazakhs have al-
361 ways had some acquaintance with agriculture. Rich men some-
463 times hire Uighurs or Chinese to cultivate grain for them on suit-
221 able land; on the other hand, poor Kazakhs, whose herds are not
241 large enough to sustain them, turn their herds over during the
summer to richer clan relatives and work at cutting and storing
hay or at cultivating grain or potatoes.

*563 Like other nomads, also, the Kazakhs do not wander planlessly.
221
[618] Summer pastures belong collectively to a group of families form-
361 ing a clan, identified by a common ancestor (real or fictitious);
these pastures lie within a larger territory in which jurisdiction
[592] is claimed by the larger unit, the tribe. Winter quarters more
commonly belong to a single family, often the "large family" of
several generations living together. The chief migrations are in
spring, from winter quarters to summer pastures, and in autumn,
from summer pastures back to winter quarters. The most hazard-
ous migration is in spring, when herds are weak after the winter,
when lambs are being born, and when spring blizzards may cause
heavy losses.

Good winter quarters are much harder to find than good sum-
mer pastures; shelter and food must be in close combination.
Hence the scarcity of suitable winter quarters rather than the
amplitude of summer pastures determines the total population
capacity of a nomad territory. In practice the wealthy families

Tadjik

*563 The Sarikol Valley lies
131 close to the point where the Chinese,
Soviet and Afghan frontiers meet, but the frontiers are not well defined, have been disputed in the past, and may be disputed
[466] again. The Sarikolis are resentful of Chinese rule, especially because of the burdens imposed on them for supplying men and animals, without pay or for insufficient pay, to keep open a high mountain route between Sinkiang and India which is used by official travelers and to a smaller extent by traders. This discontent might take the form of an attempt to break away from Chinese rule, but if so it is not clear what other people they would prefer to join.

*563 There are two Iranian languages spoken in adjoining districts.
197 One is the Pamir group of dialects, spoken in the Wakhan Valley of Afghanistan and in the Mountain Badakshan Autonomous Region enclosed within the Tajik Soviet Socialist Republic. The other is Tajik. Thus the question whether the Sarikolis speak Tajik or Pamir Iranian is important, but there is as yet no authoritative answer.

*563 The Sarikolis are said by Grenard to be a remnant of the early
174 inhabitants of Khotan who left documents dating from the period 200–400 A.D. in the Saka language, a now extinct Indo-Iranian tongue. T'ang Dynasty Chinese records likewise describe the Sarikolis as identical in external appearance and language with
[779] the inhabitants of Khotan. At that time they were devout adherents of Buddhism, maintaining no less than ten monasteries in their little kingdom. The Chinese first conquered the region in the T'ang Dynasty and established there a military post which marked the extreme point of Chinese military occupation in Central Asia.

*563 Subsequently the people were converted to Islam. They now
779 adhere to the Ismaili sect of the Moslem faith, which acknowl-
212 edges the Agha Khan in Bombay as its head. Culturally they are extremely backward, and are still without a written language.

*563 The people live for the most part as settled cultivators despite
241 the fact that the Sarikol Valley nowhere drops below 10,000 feet.
311 Irrigation is practiced, and the main crops are oats, barley, and
161

[p. 138]

1: Lattimore H-4 (no date) 1950 AI 1 Sinkiang AI 1
Tadjik
Chinese

legumes. Despite difficult conditions, the land is apparently capable of supporting a larger population than it does at present. In the T'ang Dynasty, the population was of such a size as to support five hundred monks and a military force of no less than a thousand men. In the last century the population has declined, in part because of slave-hunting raids conducted by peoples from northern India before and after the time of Yakub Beg.

At present the settled population lives in close contact with pastoral Kirghiz. The relations between the two groups appear to be friendly. On the other hand the relations of the Tashkurgan population with the Chinese administration have not been good in recent years. There existed in the area an organization known as the Partisans of the Red Tents — made up of Kirghiz or Iranians or both — which opposed the provincial administration and was friendly toward the program of the Kulja group. Whether the name of the organization is due to a more decided political coloring cannot be ascertained as yet.

3. NATIONALITIES WITH NO REGIONAL OR TERRITORIAL BASE OF THEIR OWN

Chinese. It is noteworthy that though Sinkiang is a Chinese province, there is within it no significant territorial enclave in which the population majority is solidly Chinese. Ever since the foreign policy of China first penetrated Sinkiang in the second century B.C., the Chinese have intermittently figured among the important population groups in the area, but not as colonizers who displaced the native population from large blocks of territory. In between the periods of their ascendancy they either remained as an alien minority, returned to their homeland, or disappeared in the savage massacres which they often invited by their own misrule.

In the second half of the last century the Chinese were almost wiped out in the great rebellions which shook the whole northwestern section of the Manchu Empire. Since then they have filtered back into the area. With the exception of criminal exiles sent to Sinkiang under the Manchu regime, the Chinese who have

1: Lattimore H-4 (no date) 1950 AI1 Sinkiang AI1
Manchu

*563 167 174 in either agriculture or trade, those in the Ili area were established as military colonists. One garrison consisted of Solons from the upper course of the Nonni River in Northwestern Manchuria, famed for their skill in archery. The Solons were regarded by the Manchus as a valuable auxiliary tribe, but their original language, as still spoken in Manchuria, is different from Manchu, though related to it. Another garrison consisted of Sibos, from Central Manchuria, who were often employed in the province as scribes and clerks. The Sibos are also not regarded as "true" Manchus. They appear to be of captive or semislave origin, and were perhaps a tribe akin to the Manchus who resisted Manchu unification at the beginning of the seventeenth century. They had a reputation for not succumbing to Chinese influence and for retaining command of their own language and customs. Both groups were given rich lands in the Ili Valley, the Solons on the right bank of the river and the Sibos on the left bank.

*563 174 161 361 101 During the 1911 Revolution most of the city Manchus in Sinkiang were massacred, but the village communities defended themselves and survived. At present the Solons number 2500 and the Sibos 9200 out of the total number of "Manchus" in the province. With the exception of some 1700 in the Chuguchak region, virtually all of those classed as Manchus are in the Ili Valley. Here they continue to predominate in a few villages on either side of the river in territory that is predominately Kazakh or Uighur.

*563 ●241 231 191 For the most part, the Manchus live by agriculture — though this is supplemented also by sheep raising and hunting. To a considerable extent they have succeeded in maintaining their traditional way of life, even to the point of preserving their military ability. Nevertheless they are also in the forefront of current developments in the province. Many speak other languages beside their own, including Russian. At one time there was even talk among them of replacing their Manchu writing with a script based on the Latin alphabet. The Sibos in particular have been highly praised for distinguishing themselves in carrying out tasks assigned them by the Kulja regime, such as delivering grain and clover.

1: Lattimore H-4 (no date) 1950 AI 1 Sinkiang AI 1
Kazan Tatar

In 1552 Kazan was conquered by the Moscow State, and from this time on the Tatars have been under Russian rule. In 1920 they received autonomous status and formed the Tatar Autonomous Soviet Socialist Republic, in which they comprise the majority of the population. Considerable numbers of them live also in the Bashkir A.S.S.R. and in the Molotov, Gorki, and Saratov districts of the R.S.F.S.R., as well as in Sinkiang. 563* 174

Before the revolution the main economy of the Tatars was based on agriculture, but many individual Tatars were active traders, especially as middlemen for Russian firms in Turkic speaking areas, such as Russian and Chinese Inner Asia. 563* 241 441

Tatar is a Turkic language and belongs to the northwestern group of this language family. [197]

The Tatars are Sunni Mohammedans. They were converted to Islam in the tenth century. After the Russian conquest of the Volga region, attempts were made by Russian colonizers to convert them to Christianity by offering economic advantages to converts, but success was negligible. 563* 771 797

The older Tatar literature represents a comparatively small body of primarily religious literature. In the second half of the nineteenth century a secular, rational, realistic, and increasingly nationalist trend made itself felt under the influence of Russian culture. In the twentieth century, Tatar literature — like Russian literature — has been strongly preoccupied with practical political questions, and the various literary schools have been political schools rather than aesthetic movements. Today the Tatars in the Soviet Union possess a flourishing literature, strongly influenced by Western forms. The complicated Arabic script which had been such a bar to the elimination of illiteracy was abandoned in favor of a Latinized script which, in the late thirties, was in turn replaced by a Cyrillic script. 563* 779 538 186 212

1: Lattimore H-4 (no date) 1950 AI1 Sinkiang AI1

233 camp and move just for the sake of happy vagabondage. If the drives are too long or have to be made over unfavorable intervening country, the animals lose condition or go lame; and lame cattle cannot graze well. Therefore every shift of camp is an equation which has to be worked out in such a way that the benefit of the fresh pasture is greater than the damage done by moving. Moreover there are often times when it is preferable or even compulsory to graze some kinds of stock at a distance from others.

233 241 Pastoral nomadism always has a fringe of farming, which may be either rainfall farming or irrigated farming. In past history, at times when the power of the nomads was ascendant, these margins were cultivated for the benefit of the nomads by subject, tributary, or hired people drawn from settled communities. Recently, when the authority of a settled state has been paramount in Sinkiang, as in similar periods in the past, two processes developed. On the one hand, poorer nomads took to agriculture. Some of them became permanent farmers, breaking away from their ties with the nomadic community and no longer submitting to its authority. Others spend part of the year growing hay and grain for richer members of their clan or tribe. On the other hand, the authority of the settled state deliberately pushes colonization by cultivators out into nomad territory, sometimes for strategic reasons and sometimes merely for profit.

168 563 241 When the Manchus overthrew the Jungar Mongols late in the eighteenth century, they used farming colonists to displace nomads. Colonization continued under the Chinese Republic and is still continuing. It is economically profitable to the Chinese authorities to expropriate land from nomads and sell it to colonists, and it has been considered politically profitable when it results in quarrels between Uighur colonists and Kazakh and Mongol nomads. Chinese refugee colonists have also been brought in from Honan, in central North China; to make room for some of these, machine guns mounted on trucks were used to exterminate Kazakh camps. (Personal information from American observer.)

000 There is also some voluntary development of agriculture by

There is also some voluntary development of agriculture by 241.

nomads. There are Mongols in the Baitik Bogda who are both herders and cultivators.[3] Farming began among some of the Torgut Mongols along the Chingho, west of Manass, at the beginning of the present century.[4] In 1943, Kazakhs dug an irrigation canal from the bank of the Kunges, one of the main affluents of the Ili. Two kinds of change take place along the southern foot of the Tien Shan. Uighur owners of sheep in the oases send them up to the alpine meadows of the Kirghiz to pasture, and near Bai and Uch-Turfan Kirghiz, crowded out of these pastures, have taken to farming in the Taushkan and Kharabagh Valleys.[5]

Oasis Farming

There are two kinds of oases in Sinkiang: the oases of the south, which are sharply isolated from each other by desert stretches, and the oases of the north, which have fringes of land in which rainfall farming can be carried on, or still wider fringes of grazing land. The typical characteristics of oasis life are therefore much more sharply accentuated in the south. 133 241

The first oasis makers were probably men who lived along the banks of the rivers in the desert, and in the marshes, where they caught fish, hunted, and gathered wild food crops. A "crop" of the Lopliks of the Lob Depression, the most primitive surviving community in the Tarim Basin, is the tender shoots of the marsh reeds. When irrigation began, it seems to have been practiced first on the lower courses of the rivers, where the soil was soft and the engineering problem required only the digging of simple ditches from the banks of the streams. In the course of time, as knowledge of engineering developed, the tendency was for the oasis to move upstream toward the boulder slope at the edge of the foothills, but not back into the gorges where the engineering problems were far too great. There were three reasons for the upstream shift: out on the plain, the slow speed of the water 241 312

[3] Douglas Carruthers, *Unknown Mongolia*, London, 1913, Vol. II, p. 462.
[4] Sung Po-lu, *History of Sinkiang*, 1913, chuan 2, p. 8 (in Chinese).
[5] R. C. F. Schomberg, "The Habitability of Chinese Turkestan," *The Geographical Journal*, Vol. LXXX No. 6, Dec. 1932, p. 510.

1; Lattimore H-4 (no date) 1950 AI1 Sinkiang AI1

241 312 silted up the canals; the flat level did not allow sufficient drainage from the fields, which gradually accumulated salts; the communities upstream had first access to the water. The drying up of Inner Asia has been blamed for the abandonment of ancient oases found out in the desert, but it is probable that the causes just described are more important than any change of climate in the last two thousand years.

312 Oasis engineering remains extremely simple. The basic pattern is a main canal from the river, branching into smaller canals, which branch in turn into the ditches which deliver water to the fields, all arranged so that water flows by gravity from level to level, without the pumping or bailing devices which are widely used in China and in Soviet Turkistan to lift water from lower to higher levels.[6]

[133] Of the rivers of Sinkiang, the most important for irrigation is the Yarkand Darya, known in its upper reaches as the Zaraf-shan.[7]

[6] Two kinds of weirs are used to divert water from the river into the takeoff canal. Field notes of an Academia Sinica expedition describe a solid weir which was examined at the point where the Aksu Darya forks into two streams, the Kone Darya or Old River and the Yangi Darya or New River. A fork of this kind is often formed when a river channel silts up and later a freshet of high water comes down the choked channel; the force of the water bursts out at one side of the old main channel, and a subsidiary stream is formed, flowing away from the main stream. Since the Old River irrigates the oases of Aksu and Avat, a solid weir was built to divert some of the water of the New River back into the Old River. Trunks of the *toghrak*, or wild desert poplar, were used as stakes. Between these, cribs were woven with smaller branches and twigs and filled with stones and rubble. A weir of this kind is of limited efficiency. When the river reaches flood level in July and August the weir is battered down, too much of the water of the Aksu Darya discharges into the New River, and the crops in the oases fed by the Old River are imperiled. Solid weirs are used on the larger streams. On smaller streams, where the irrigators hope to be able to control the flow of water, draw-weirs are made with openings or sluices. In some localities, such as Kargalik, instead of building permanent sluice gates or panels the sluices are closed temporarily with rubble.

[7] The Yarkand Darya has also repeatedly changed its course. Thus the brilliant Chinese scholar Hsu Sung described how two tributaries of the Yarkand Darya joined in the second decade of the nineteenth century to form the oasis of Merket, but Sir Aurel Stein's maps show that the present

money capital, however, it is not surprising that the line at which work actually starts is still determined by the necessity for public labor, which must be assembled and directed by the exercise of public authority in some form. A typical recent example is the digging of an irrigation canal in the small oasis of Chira. As six villages were affected, three hundred men were assembled from these villages under the authority of their own village headmen. The village organization, however, can be superseded by the higher administrative authority of Chinese officials. The general rule is: local undertakings on a moderate scale are carried out within the limits of such co-operation as can be organized by village elders or headmen; enterprise on a large scale requires the intervention of a Chinese official.

At levels below the intervention of Chinese officials, traces of very ancient practices are found. Field investigation in a village in the oasis of Kucha revealed the survival of the "*ketman* of labor," a concept which combines units of labor, land, and water. The *ketman* is a broad-bladed mattock, the most ancient Inner Asian agricultural tool, which to this day is more widely used than the plow. A "*ketman* of labor" is the work of one man contributed throughout the digging of a canal, which entitles him to a "*ketman* of water," enough to irrigate from ten to fourteen acres.

In this village, however, the uniformity of the concept proved not to be reflected in uniformity of water rights. Of the total population about 8 per cent were landlords and rich peasants; but this 8 per cent owned about half of the total water supply. At the other end of the scale 17 per cent of the population had no water rights whatever, and were forced to purchase their water with a share of their crop. In between these two groups, one half of the water was owned by 75 per cent of the households. These families, classified as middle and poor peasants, had rights to an average of one third of a *ketman* of water for each household.

The shuffle which takes place between the contribution of labor and the allocation of water rights is accounted for in various ways. According to the Islamic principle of *mavat*, he who first

423 241 applies water to land has the right to both water and land; but by a legal reasoning which is not difficult to follow, the ancient prescriptive communal right of the man whose labor helps to bring the water to the field can be superseded by the claim of the man who organized the labor and directed the enterprise.

578 423 241 Thus in 1940, in the large oasis of Aksu, the Chinese district magistrate ordered the digging of a canal to open a new settlement at Sachintze, about forty miles south of the district city. Each head of a household applying for land in the new settlement was allotted a section of about one hundred feet on the bank of the main canal. He was then entitled to as much land reaching back from this canal frontage as he could clear and as much water as he needed to irrigate it. Land and water rights were thus combined, and were in proportion to the amount of labor at the disposal of the setder. It is not surprising to find both that quarrels over water rights are chronic, and that those who are powerful and successful within the community in other ways are usually successful also in maintaining and increasing their water rights.

566 312 423 More than a hundred years ago, at a time when the Chinese or Manchu imperial authority in Sinkiang was exercised only in questions of high policy and rarely interfered with questions of local custom, a Chinese writer recorded the abuses of the Begs or local notables, and the efforts made by the Chinese administration to "persuade" them to concede some of their water rights to poor peasants. In the eighteenth century, a Manchu writer noted that Begs or landed gentry had rights over households of *chakar* or serfs who were obliged to till their land for them.[13] By their claim on the labor of these serfs, the Begs under the doctrine of *mavat* also claimed the right to water from canals dug by the serfs.[14] *Chakar* serfdom still survives here and there. Field investigation revealed a landlord in Kucha with over two hundred

[13] Sung Yin, *A Sketch of Sinkiang*, written in the eighteenth century, published in 1821; Ch. 3, p. 28 (in Chinese).

[14] E. Zalkhina, *Outlines of the Agrarian Problem in Central Asia*, p. 9 (in Russian).

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households of *chakars*, from whom he claimed both labor services and rent in kind.

When the water finally gets to the field, its allocation to the cultivator is calculated in terms of the flow for a certain number of hours, according to the width and depth of the canal. Millers have the right only to run water over the wheel, and must then return it to the canal. Such matters, together with the maintenance of registers and the supervision of upkeep, are under the authority of an official called the *mirab*, who is locally elected, which means that in his election the locally influential families usually determine the choice. In addition, Moslem religious officials have certain traditional rights, especially of adjudication. Within localities, disputes are most frequent in the spring, when each cultivator is eager to be the first to get water on his land. Between localities, the most important disputes are between upstream and downstream communities. Disputes have been going on for twenty-five years between Yarkand, which is big and powerful, and Merket, which is smaller but rich in the cultivation of cotton. Quarrels can be carried from lower to higher authority. A dispute between the villages of Punak and Malihalihan, in the subdistrict of Chira, was carried up to the district administrator of Khotan, who decreed that for two days each month in February, April, and June Punak should turn over its flow of water to Malihalihan. The intervention of higher authority is a traditional opportunity for the collection of bribes by Chinese officials.

Oases vary greatly in size but closely resemble each other in structure. Every oasis has a village or town, sometimes a walled city at its center. Larger oases may have several such towns. These centers are called "bazaars" and serve as market places for farm produce. In the larger bazaars there are also artisans such as blacksmiths, carpenters, coppersmiths, cobblers, and wheelwrights. Smaller bazaars, which cannot support many permanent shops, have their market day on different days of the week and the merchants and artisans visit them in rotation.

Around the bazaars are the farms, each with its own homestead. An important function of an oasis bazaar is the distribution

L: Lattimore H-4 (no date) 1950 AI1 Sinkiang AI1

[244] of night soil to the farms as fertilizer, and the farms which are 361 nearest to the bazaar and therefore receive the most night soil 241 form a zone of intensive garden cultivation producing vegetables and fruits for sale to the nonfarming population. In Kucha, a fairly large oasis, fertilizer is generously applied within a radius of five miles from the district city. Within this zone there is one orchard of seventy-five acres which produces apricots as a cash crop for the market. Beyond this inner zone, the amount of fertilizer applied decreases rapidly, and two other zones may be distinguished. In the near one rice, corn, wheat, and cotton may be grown and wheat and corn, when manured, may be grown in rotation. In the third zone practically no fertilizer is used and here hardier crops such as millet, kaoliang (sorghum millet), and potatoes are planted, and fallowing must be practiced. When some fields must lie fallow, the small farm is at a great disad- [435] vantage in competition with the large farm. In this zone the cost of transport to market rises rapidly, and the price of land falls.

361 Beyond this third zone there is usually no water and the desert 233 begins abruptly. Sometimes on the fringe of an oasis, however, 312 there is a thin zone of grazing. Sheep are pastured here, and at the edges of roads, and in land within the oasis too rough for irrigation. Sheep are also pastured in a few places in the scrubby land where dying rivers reach the desert. The shepherds are the Dulani, a people of uncertain but probably nomad origin who live a gypsy-like life and keep apart from the settled Uighurs of the Tarim oases. Both Uighurs and Dulanis breed a sheep which is better for mutton than for wool.

433 Most food is consumed in the oasis where it is grown, though 262 some oases have a surplus for sale while others are not self-suffi- 146 cient. The diet of an Uighur villager is largely cereals. The consumption of sugar, fats, and meat is meager except among the wealthy, and there is practically no milk in the diet. The daily calory intake of an adult villager, as estimated in Khargalik in 1943, was 1215 calories of wheat flour, 1215 of corn flour, and 150 of mutton.

2: Norins S-4 (1939-1941) 1944 AI1 Sinkiang AI1

An indication of confidence in Sinkiang finance is seen in the report that over $5,444,000 Chinese were subscribed in the province for her 1941 Reconstruction Bond Issue. Yet this does not necessarily mean that she is financially solvent. Quite the opposite is suggested by Chinese comment of November, 1942, that the Sinkiang budget of that year showed a considerable deficit and that the achievement of a budget balance is still considered one of the most serious current problems before the provincial government.

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Agriculture and Irrigation

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Because of their basic importance to the life of the province, agricultural and irrigation developments deserve special scrutiny. There are indications that the Sheng Shih-ts'ai administration has given the problem considerable attention, but the available information is not satisfactory. Under these circumstances it might first be well to consider the following base figures given by Chiang Chün-chang for 1918 cultivated acreage in Sinkiang:

CULTIVATED ACREAGE IN SINKIANG, 1918

Crop	*Acreage*
Wheat	480,782
Corn	340,486
Rice	52,790
Melons and other fruit	46,737
Cotton	40,025
Sesamum	33,815
Kaoliang	32,325
Beans	23,040

These figures can hardly serve as a definitive 1918 total of cultivated land for the province; some of the crops may, for instance, have been rotated on one and the same acreage. They do suggest, however, that in 1918 there was a total Sinkiang cultivated area in round figures somewhere between a minimum of 500,000 and a maximum of 1,000,000 acres. If Chiang's figures may be considered typical, they also show that cultivation of wheat and corn has by far overshadowed that of other agricultural products, and that the province does have a history

241 of a considerably varied cultivation. Samuel Chao, an authority on Northwest China, says, in fact, that her natural riches have made Sinkiang the third largest agricultural producing center of that broad region.

241 312 In the absence of figures showing increase in cultivated acreage under Sheng's administration, statements as to the improvement of native irrigation facilities are useful—for most of Sinkiang's agricultural development has for centuries been dependent on widespread use of just such irrigation. Under Sheng's first three-year plan twenty-two new irrigation conduits were opened and forty-two old ones repaired. Nine river-deepening projects, two artificial basins for watering of cattle, and the repair and deepening of the locally famous thirty-five mile Hui-yüan irrigation conduit were some of the other tasks undertaken in the same period. By 1940 it was estimated that there were 944 main irrigation canals and 2,335 branch canals in the province. One Chinese writer enthusiastically claims that the cultivable land reclaimed as a result of the improvements mentioned amounts to approximately seventy thousand acres. A more recent survey, available in November, 1942, states that more than 3,000 miles of water conduits and wells have been added to, or repaired in, the provincial irrigation system, making available more than 150,000 acres of cultivable land. While these figures leave an uncertainty about the exact amount of land that actually is under cultivation today in Sinkiang, they do point to considerable emphasis on the problem of land reclamation. The work, moreover, undoubtedly has raised the 1918 base minimum of some 500,000 acres of cultivated land considerably in the direction of —if not beyond—the possible 1918 maximum of roughly 1,000,000 acres.

241 Ha-mi, Tihwa, Sui-lai (Manas), and Sui-ting in the north and Turfan, Aqsu, Kashgar, and Khotan in the south have all been famous in one way or another for their agricultural or related produce. Tu Chung-yüan claims that agricultural products of Sinkiang are "far superior to those of the interior in body, beauty, ripeness, and size." He then continues, "If one were to plant a Ha-mi melon seed elsewhere in China, the first year's crop would bring a change in the sweetness and beauty of the fruit. By the second year the melons would be un-

recognizable so far as quality and taste are concerned." Turfan grapes are exported in dried raisin form to other parts of China; I tried them repeatedly in Kansu Province, and can testify to their delightful taste. The Sinkiang rice, too, is notable for the size and meatiness of its kernel. Chinese from Hunan are said to have first brought rice cultivation to Sinkiang, toward the end of the nineteenth century when they began cultivating the crop along the banks of the Urumchi River. Aqsu, Manas, Wu-su, Sui-ting, and San-tao Pa at present are all rice-growing localities.

South Sinkiang is the principal cotton-growing region, and the crop of Turfan, with an annual yield recently estimated optimistically at some 4,000,000 *chin* (catties), is the best. Flourishing cotton fields abound also at So-ch'e, Maralbashi (Pa-ch'u), Shan-shan, Su-lo, and Korla. In the past Sinkiang cotton was practically all of local origin, but in recent years American cotton seed, imported from Soviet Russia, has begun to predominate. The estimate of one Moslem merchant (as reported in late 1942) put the annual provincial crop of Sinkiang-type cotton between 40,000,000 and 50,000,000 catties.

Around a million catties of raw silk reportedly is produced each year from Khotan, Yarkand (So-ch'e), and Su-lo acreage, and a considerable increase is expected; for the provincial Reconstruction Commission has been importing improved silkworm eggs and extending sericulture plots.

Animal Husbandry

When Chinese Minister of Agriculture and Forestry, Shen Hung-lieh, visited Sinkiang in 1942, he and Ch'en Chi-jung, a *Ta Kung Pao* newspaper correspondent, inspected a number of cattle ranches near the Urumchi River. Ch'en on that occasion was told that the technique developed on the Sinkiang ranches in the past five years of cattle breeding could be compared favorably with that of any nation in the world. This achievement, in combination with some of the world's best pasture land, has made animal husbandry vie with agriculture as one of the foremost occupations of the New Sinkiang. Samuel Chao estimates that it is engaged in by one-fourth of the Sinkiang people, and elsewhere it is pointed out that in this field Sinkiang leads all other

3: Skrine G-3 (1922-1924) 1926 All Sinkiang All

quality not seen in lower snows, makes it an impressive spectacle. The wide floor of the Sariqol Valley is dotted with homely little farmsteads, each nestling snugly beside a clump of willows. The soil is remarkably good; wheat, barley and oats sown in May are reaped in October, and two crops of lucerne are usually taken. Sweet-smelling purple orchises, gentians, vetches of all colours and primulas of large size line the paths in June and July.

The Amban of Sariqol, our first acquaintance in the Chinese official world, was not a favourable example of his kind. He was an opium-smoker, and shortly after our arrival at Kashgar was relieved of his post. I called on him my first morning, as I was determined to be polite in spite of his having practically ignored us the previous day. As I arrived only half an hour after the appointed time, nothing was ready, and the Aqsaqal and I had to stand in the waiting-room of the "Yamen" or magistrate's quarters amid an interested crowd of bottle-washers and hangers-on, while a servant hurriedly brought in a small table, two chairs and some uninviting-looking sweetmeats. Finally the Amban came in and we both sat down. Pale green tea tasting strongly of hot water was our tipple; conversation, I regret to say, somewhat flagged, the old Amban being obviously under the influence of opium while my style was cramped by the "gallery" standing close around and following every syllable, every mouthful. I was relieved to be able to escape after twenty minutes or so of this entertainment.

The Amban was in better form when he returned my call the same afternoon, and did his best to make amends for his previous remissness. This encouraged us to invite him, his young son, the Commandant of the Garrison and his adjutant, and the Pir of the Maulais to tea the following afternoon. I found out afterwards that it was a mistake to ask the Pir, as the Chinese seldom sit at table with their subjects. D. spent the whole morning making scones and sweets, and the party was a great success. Conversation flourished, the Amban being quite talkative. He spoke in Chinese to the Adjutant, who translated into Turki to Nadir Beg, who translated into Persian to me and I into English to D. So:—

AMBAN (to Adjutant): How old is the *Tai-tai* (lady)?
ADJUTANT (to Nadir Beg): How old is the *Khanum*?
NADIR BEG (to me): How old is the *Mem-sahiba*?
I (to D.) How old are you?

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and it will grow into a full-sized tree; the other is its tendency to vertical rather than horizontal cleavage. The result of the first is that wherever water can be brought (the climate of the plains is almost rainless, but water from the encircling mountains is plentiful for irrigation) the land is closely cultivated, willows and poplars line every water-channel and the farmsteads are buried in foliage. The second peculiarity results in the landscape being broken up most picturesquely in the neighbourhood of the many rivers by perpendicular cliffs or river-bluffs, seldom more than thirty or forty feet high, but bold of outline and of a rich yellowish hue, with farmsteads perched on top of them and mills nestling below, trees and crops growing to their very edge and greenery in every cranny.

The whole aspect of the better-watered parts of the oases is one of immemorial peace and contentment and of a civilization, such as it is, that has persisted unchanged for centuries. Nowhere could be found a more striking illustration of the strength and permanence of a rural population with its roots deep in the soil, especially when that soil can only be made productive by means of an elaborate system of irrigation. Politically, Kashgaria has had as stormy a history as any country in the world. During the last 2,000 years or a little more the Chinese have conquered it five times, and four times they have been evicted from it. The total period of their occupations up to date only amounts to about 425 years; during the remainder of the time Kashgaria has been the prey of one conquering people after another. Huns, Yüehchih or Indo-Scythians, Hephthalites or White Huns, Tibetans, Uigur Turks, Qara Khitai,[1] Mongols under Chingiz Khan, Dzungar Mongols and Turkis from the Transcaspian Khanates have all won and lost it in turn. Apart from these more cataclysmic changes, civil war has at various periods raged between the larger towns, Kashgar, Yarkand, Khotan and Aqsu. Yet down through the ages generation after generation of peasants have yearly tapped the summer floods from the mountains and have raised their crops of wheat and barley, rice and millet, cotton and maize and melons, while wave after wave of conquest has rolled over their head. Whenever any conqueror or tyrant has interfered overmuch with the cultivator, his greed has been his downfall. A striking recent example of this

[1] The twelfth-century conquerors who gave their name to "Cathay." Stein, "Journal of the Royal Geographical Society," June, 1925, p. 495.

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them a few years ago. It was a pity that bad visibility and shortage of time prevented plane-tabling in this region, so that I was unable to supplement Sir Aurel Stein's map by fitting into it a traverse of our route, which except for 14 miles in the Chighmen and Suget Jilghas was one which had not previously been followed by Sir Aurel or any other explorer.

Leaving Yarkand on 2nd April we spent the night at Qaraul Jash, 15 miles to the south-west of the city, as the guests of the British Aqsaqal, who had estates in that neighbourhood. Next day we plunged into the barren foothills of the Qizil Tagh. A long and hot march brought us to the only water in the region, brackish but just drinkable, a spring called Achiq Yusuf Qadir Khan. Here we camped thirstily, leaving at an early hour next morning in order to reach sweet water as soon as possible. It was not till three in the afternoon, however, that we crossed the last range of hills and found ourselves quite suddenly in the Chighmen Jilgha, a long valley which comes down from the inmost fastnesses of the Red Mountains and eventually debouches near Qizil Bazar on the Yarkand-Kashgar road. What a treat it was to come suddenly on a crystal, ice-cold stream and a little mill among willows just showing their spring green! It was too early to halt and we filed up the valley, passing croft after croft of the Kirghiz' rough stone-built huts with steeply-terraced cornfields now just beginning to be ploughed with the help of water carried along the hill-side in narrow channels. For these were "farmer Kirghiz" as we called them, not the pastoral, *aq-oi*-inhabiting Kirghiz of the higher mountains. Here are no great flocks and herds as on the high pastures of the Pamirs or the Tien Shan; only a few sheep and goats nibbling the scanty weeds along the rocky banks of the stream, guarded by tawny, thick-furred dogs. We stopped at a croft slightly larger than the rest to talk to the local Qazi, a typical thin-bearded, high-cheek-boned old Kirghiz, who earnestly begged us to pitch our tents on one or other of his pocket-handkerchief fields and be his guests. We spared the old man and pushed on another mile and a half, camping on a sheltered patch of grass in a bend of the stream-bed, 7,000 feet up.

Next day we contented ourselves with a half-march of nine miles only and camped at the tiny Kirghiz settlement of Suget Ayaghi, near the outlet of the Suget Valley, an upper branch of the Chighmen. The first inhabitants we saw in this valley were four tiny tots of children whom we surprised

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toddling down to the ice-covered stream with blackened copper water-jugs to fill, a pretty sight. Later, when our camp was pitched, came three cheerful vast-turbaned, apple-cheeked ladies, with their sewing and their babies, and made themselves comfortable on the grass in front of D.'s tent, chatting with us and among themselves until D. should be ready to receive them inside. Then they crowded into her tent and hung excitedly over her unpacking. Though accustomed to friendliness and naturalness on the part of the Kirghiz, D. was at first a little puzzled at the remarkable lack of shyness of these women, on our very first appearance among them; but the mystery was soon solved. As she was setting out her toilet-table one of them suddenly pounced on a box of *trèfle incarnat* with cries of "Ufpah! Ufpah!" which means "powder-puff." D. was astonished, until they explained. One of them, it appeared, was the daughter of old Ibrahim Beg of Yambulak, and had recently been on a visit to her parents, who had told her all about our stay in their valley last July on our way to Kashgar. Consequently, the Suget ladies knew all that D. had then said and done, how she had given those of Yambulak cold cream for their hands and had initiated them in the mysteries of powder and puff, how she had promised them gloves and had painted a picture of the Beg's pretty daughter-in-law, and many other items of breathless interest. So D. knew what was expected of her, and ere long the camp resounded with their delighted gigglings as they powdered their noses and preened themselves in front of D.'s camp mirror.

Soon after leaving Suget Ayaghi we passed through a remarkable cleft in the high rocky wall and found ourselves in a wide sunny valley with snow-clad peaks at its head. Here, at a height of about 9,000 feet, were the summer pastures of the Suget Kirghiz and two of their cottages. There were no trees, but high up on the flanks of the central peaks we could see patches of fir-forest. This, we were told, was the valley to which the missionaries from Yarkand had come more than once for their summer camp. Leaving the Suget Jilgha by a pass just over 10,000 feet high we descended into a pleasant little valley called the Tam Jilgha, so called from the number of stone houses (*tām*) it contained. Poplars grew in it, remarkable at a height of over 9,000 feet, and there was quite a respectable area of cultivation, chiefly barley. Here we saw three different kinds of animal being used in the plough

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The Kirghiz of the Kaying valley cultivate only a few acres of barley and eat little bread. Their staple food is milk and its products, *katak* or sour cream and *qurut*, a kind of cheese. In most tents you will also find a cauldron of *mach* brewing, the soup containing flour and milk already mentioned. *Qurut* is made by drying sour cream in goat-skins; the method is to hang the goat-skins full of cream about eight feet from the ground under a piece of cord netting stretched across the top of four posts. The netting keeps off eagles and hawks, while the height from the ground defeats dogs and other animals. When a Kirghiz is to be away from his home for a day or more, he takes with him for food a few balls of *qurut*, and supplements them with wild rhubarb and celery which he knows where to find on the mountain-side. Bread is made in solid lumps, the only leaven used being sour milk; the poorer families can seldom afford it, fortunately for their digestions. Meat is even more of a luxury; a sheep is only killed on great occasions, when the meat is boiled in large cauldrons, not roasted. Sometimes one of the *mergens* or hunters of the community succeeds in slaying an ibex hind with his ancient matchlock, and then there is great feasting.

A valley like Kaying is almost but not quite self-supporting. Boots, Kashgar cotton cloth, muslin and coloured handkerchiefs for the ladies, knives, etc., are bought by the men on their rare expeditions to Yangi Hissar, or from the itinerant traders from the plains who visit the valley two or three times during the season. The money for these purchases is found by the sale of such surplus local products as remain after the revenue and other demands of the Beg have been satisfied. These products include live stock, raw wool, rope and matting made of camel's or yak's hair, cheese, red fox pelts and ibex

Chimghan, with Tersöze and other side-valleys, 60 households.
Khanterek, i.e. the main valley and its branches below the great gorge, including Kaying, Chopkana, Yapchan, etc., 30 households.
Terek Kichik (among the mountains on the east side of the Qaratash), 100 households.
The assessment of a typical division, the Chimghan, is as follows:
4 *saghins* of cheese, i.e. the output of 4 yaks in a year.
40 camel-hair ropes.
100 *charaks* of barley flour (1 *charak* 20 lbs.).
10 yaks or ponies to be lent for transport purposes whenever required.
Besides the above, the Beg exacts one sheep per household for himself; he receives no pay from the Chinese authorities.

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sent up it to look for water came back saying that there was none for "two potais" (5 miles), only a spring high up among the mountains which they could not reach. I was not inclined to reload and toil many miles farther up the valley to the next halting-place, so I thought I would have a look myself. Half a mile up the side-glen the soil was damp, and a little farther I came upon a string of tiny pools. The flow was almost imperceptible, and a few yards further on the soil was again dry. But it was enough; we filled our buckets with sweet water, at the rate of about one per hour, and the animals were all watered by midnight. Evidently the Kirghiz (who were particularly shy at this place) had misled our servants and concealed the existence of the spring for fear lest we should drink up all the water and perhaps foul the supply.

Our next camp was a pleasant one, at Qaragor Kul ten thousand feet up among the very tops of the gently-rounded grey-green hills. Here there are no springs at all; a certain amount of rain falls, judging by the grass which covers the land, but there must be something in the geological structure which prevents the formation of springs. On the other hand there are several shallow basins in which the rain-water collects; the Kirghiz camp with their herds of ponies and flocks of sheep and goats beside one of these rain-ponds until they have drunk it dry, when they pass on to another. Qaragor and its neighbourhood lie within the jurisdiction of the Amban of Kelpin two marches to the south, an interesting place well off the beaten track which I would have liked to visit had there been time.

Next day we crossed two passes and descended a long glen, past patches of our first Tien Shan firs, to the wide valley of the Taushkan ("Hare") River. This stream, the main confluent of the Qum Ariq, which it joins close to Aqsu, breaks through from Semirechian territory, where it is known as the Kokshal. Its broad reaches and the snow-clad Tien Shan on its northern bank made a series of fine vistas for our delectation on the two marches to Uch Turfan. The soil of the valley is rich, and we passed through a series of picturesque villages, Somtash and Safarbai, Kok Oinak and Tusma, growing several kinds of root-crops, grain and lucerne, in the intervals between rocky ridges across which our under-sized pack animals scrambled wearily.

Uch Turfan which we reached on 11th September is a small town charmingly situated among groves of planes and tall

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cypress-like poplars. A chain of curiously abrupt, craggy hills juts out from the black fantastically-fretted mountains of the Kelpin district, half-way across the broad valley. On an isolated spur of these, close to the town, is an old Chinese castle, still kept up and occupied by a small garrison; for Uch Turfan is a frontier post of some strategic importance, commanding the high and difficult but much-used Bedal Pass leading across the Tien Shan from Semirechia. The country round Uch Turfan is closely cultivated, the soil being, if possible, even more fertile than that of the great oases of the south. Here there are no villages, nothing but countless farms standing on their own "small holdings," with fields well laid out between rows of tall poplars and many timber-trees shading the farms. From the summit of one of the abrupt hills mentioned above the view on a clear autumn day is superb. At one's feet, gardens and vineyards, melon-fields and tobacco-plantations; in the middle distance, the town with its massive walls embowered in greenery, watched over by the old castle on its crag; all around, miles and miles of fields and trees and farmsteads in rich mosaic, almost perfectly flat, with rocky hills like islands rising out of the sea of green and autumn gold; in the background, from west right round to north-east, the Mountains of Heaven in full array, furrowed deep with glens and rising in the north to Pelion piled on Ossa of eternal snow; to the south and south-west, the fantastic dark-brown and black peaks and crags of the Kelpin mountains, tier beyond tier, each a little hazier and more mysterious than the last.

I dined one day with the Amban and other officials in the gardens of Toqquz Bulak ("Nine Springs"), a Chinese pleasaunce famous throughout Sinkiang. The springs from which the place takes its name gush from the foot of one of the rocky hills near the town; there are well-tended gardens round them and a square pond lined with willows, into the midst of which juts a wooden pier. Anchored at the end of the pier, surprisingly, is a houseboat of the regular Thames or Kashmir type, containing a room fitted up as a dining-room with a kitchen and pantry off it; above, to complete the illusion, awnings and chairs and flowers in pots. One dines either in the houseboat or, if it is warm, in a summer-house on a ledge of the cliff above the pond. The Magistrate who entertained me, a Chinese Mussulman whom we were to meet again at a dramatic moment before we left Kashgar,[1] was a great horti-

[1] See pp. 264–5.

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of the Kunlun into the "Begship of the Three Hundred Hill Families," which is under the jurisdiction of the Amban of Chira. The people of Polu complain of this arrangement, for Chira is twice as far from them as Keriya. They told me however, that whereas they have always been assessed at ten families only, they number about eighty, so that their cultivation is taxed very lightly.[1] They are industrious cultivators, raising crops of barley, millet and lucerne on every available yard; but the dryness of this part of Asia is such that even here, right under snowy mountains 21,000 feet high, crops have to be carefully irrigated. There are two methods of irrigation in use; where the slope is slight, the fields are terraced in the usual manner; where it is steeper, the entire surface is covered with a key-pattern of channels about six inches deep, down which the water trickles over the whole field, a most laborious business. The chief industry, however, is stock-raising; though they look barren enough, the uplands in this neighbourhood grow excellent grass, owing probably to the fertility of the aerially-deposited loess which is found at the very highest elevations and gives a slightly dirty tinge even to the eternal snow. An excellent type of hill-pony, shaggy but better-looking and with finer hair than the Kalmuck ponies, is found here together with a black and very woolly breed of donkey; I bought one of the former for 32 taels (£4 5s.) and it turned out one of the best hill-ponies I have ever ridden. "Polu pony" as we always called him, besides being strong and willing, was a remarkably intelligent little animal and took in everything that was going on. On the long bare plateaux of Poma Qir and Chata Qir west of Polu we saw herds of yaks and camels as well as the ubiquitous sheep and goats.

An industry which would be of greater importance locally than it is, if the Chinese did not strictly control it and limit the output, is gold-washing. There is no doubt that gold exists in large quantities throughout the length, not only of the Altun Tagh but of the whole Kunlun system. I heard of gold-washing high up among the almost inaccessible gorges of the Upper Yarkand River; Stein mentions it at Pisha in the Qaranghu Tagh (Central Kunlun),[2] and speaks feelingly of

[1] This agrees roughly with what Stein heard at Chakar ("Serindia," pp. 1320–21); that the number of families in the Begship was assessed at 221, but amounted in 1907 to 1,802.

[2] "Ruins of Desert Cathay," Vol. II, p. 210.

1: Washington S-4 (no date) 1956 AF13 Northwest China AF13
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GENERAL CHARACTER OF THE SOCIETY

1. General Introduction

The Northwest of China, consisting of the four provinces: Shensi, Kansu, Chinghai, and Sinkiang, part of which is now called the Sinkiang-Uighur Autonomous Region, comprises an area of 1.3 million square miles, (almost a third of all China), in which thirty-six million people live. There are at least four different racial types (Turanides, Sinides, Mongoloides and Tangutides) and more than a dozen different ethnic groups: Eastern Turks or New Uighur (Chin. Wei-wu-erh), Chinese (chin. Han), Chinese Muslims (chin. Han-hui or Tung-kan-hui, Engl. Dungans), Kazakhs (chin. Ha-sa-k'o), Kirghiz (chin. Chi-erh-chi-ssu) Uzbeks (chin. Wu-tzu-pieh-k'o), Tatars (chin. T'a-t'a-erh), Tajiks (chin. T'a-chi-k'o), Western Mongols or Oirats (chin. Ölöt or simply Meng-ku), Sarigh-Uighurs (chin. Tung-hsiang-hui-hui), Shera Yögur (chin. Tu-jen), Monguors (chin. also Tu-jen), Salars (chin. Sa-la), Tibetans (chin. Hsi-fan), Manchu (chin. Man), Sibo (chin. Hsi-po) and Solons (chin. So-lun). The last three ethnic groups, the Manchus, Sibos, and Solons are persistently listed in Communist censuses, although it has been proved that they are non-existent as linguistic units, or as separate ethnic groups. Numerically, the Chinese constitute the overwhelming majority in the Northwest (about thirty million).

While the Turks of the Northwest (i.e. New Uighurs, Kazakhs, Kirghiz, Uzbeks, Tatars and Salars) are rather firm believers in Islam (Mohammedanism), the Western Mongols, Sarigh-Uighurs (the latter are Turks), Shera Yögur, and Tibetans are faithful Buddhists of the northern form, also called Lama Buddhism, and the Chinese believe in a variety of religious or philosophical systems: Confucianism, Taoism, Buddhism, and even Demonism and Animism.

The economic pattern of the Northwest as well displays an enormous variety; we find nomadic pastoralism among the Kazakhs, Kirghiz, Western Mongols, and Tibetans, intensive horticulture among the New Uighur of the oasis-belt of Sinkiang, agriculture by means of irrigation (kariz system. See chapter about agriculture) among Chinese (only fifteen percent of the North west agriculture is without any irrigation), sedentary Turks and Mongols, and a mixture of primitive agriculture and pastoralism among some Tibetan and Mongolian Tribes of Chinghai and Kansu. The Turkic and the Chinese Muslims are the bearers of the trade along the old "silk roads" of Sinkiang, Chinghai and Kansu. The urban centers of the Northwest are also centers of petty industry and handicraft. The newest

S N 175 towards Russia, Turkey, and England. The cultural cohesion 631 created by Islam that connects Chinese Turkestan with Russian 668 Turkestan and other neighboring Muslim countries, and that 178 created by Buddhism that connects Mongolia with Tibet 619 through Chinghai and small areas of Sinkiang, marked the 648 four provinces of Sinkiang, Chinhai, Kansu, and to a small degree, Shensi, as one single area which represents one administrative unit.

S 563 The Eastern Turks:

The main pattern of social life of the Eastern Turks is 241 based primarily on "Oasis Agriculture" with its irrigational complex. All agriculture in this area is made possible through S 563 the organized use of water. The family organization among the Eastern Turks is therefore an extended one, since a certain 596 level of productivity can only be reached through collective labor (upkeep of irrigational systems and dikes). One reason S [312] the Eastern Turks developed the extended family pattern [241] is that the family recieves water in proportion to the amount of labor its members put into the upkeep of irrigational systems and canals; the greater the family, the more water is therefore provided for their land.

The Internal structure of the family system is not based upon clan rules. Eastern Turkic communities are governed S [622] by a body of leaders, selected from the community itself [634] whereas the larger governmental districts are headed by Chinese officials or, at present, by Chinese Communists. S 563 A secondary aspect of Eastern Turkic social life is formed S [441] by trade and handicrafts. Merchants and craftsmen form "guilds" which in turn influence the social life of the community.

S K Kirghiz and Kazakhs:

563 Kirghiz and Kazakh society is clan-based. (The definition 614 of the notion of "clan" is explained in the chapter about the K Social Structure.) All family relationships are deeply rooted 563 in the clan system. The main pattern of social life among 233 these two tribes is created by their nomadic way of life, whose 361 most essential economic activity is cattle breeding. The trans- [177] ition to a semi-sedentary life is now under way. The Commun- [668] ists insist that the Kirghiz and Kazakhs occupy a permanent winter camp site, since this facilitates better political S K control over the tribes. The choice of the summer camp site [622] still remains more or less in the hands of the tribes. Kirghiz and Kazakhs are ruled by "biks," or "manaps" (elders) S N responsible to the Chinese officials.

563 The Mongols: general remarks.

[233] Mongol social life is based on nomadic pastoralism. The [594] basic unit is the nuclear family. A group of patrilineally

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preclude their enjoying any great influence.

The Salars' pattern of social life follows the Islamic form. Patriarchy rules the extended family, whose members' main occupation is agricultural work. However, agriculture goes hand in hand with trade, which plays also a noticeable role. As a group, the Salars are economically unimportant since they form only a small Turkic tribe.

The Sarigh Uighurs:

The Sarigh Uighurs, the so-called Yellow Uighurs, are a small tribe of Turkic origin which is becoming extinct. Although immediate neighbors of the Chinese, they never learned agriculture, and remained herdsmen. Nowadays the Sarigh Uighurs are mostly hired shepherds of Chinese cattle owners. Frequently one also finds them as laborers on Chinese farms. An occasional Sarigh Uighur family owns a few cows, sheep, and horses. The smallest and the only social unit, is the patriarchal family.

The Shera Yögur:

The people belonging to this small Mongolian tribe, rapidly becoming extinct, are semi-nomadic herdsmen. The old Mongolian clan-system is still preserved. Clan exogamy exists and the migrational units are the single clans. The economic centers, however, are their Buddhist monasteries, for it is the monasteries who own the herds and not the individual tribesmen.

The Monguors:

Ethnically consisting of Mongols, Turks, Tibetans, and Chinese, speaking an old Mongolian and Tibetanized dialect, the Monguors are the only Mongolian tribe of the Northwest that shifted successfully from nomadic pastoralism to farming. They learned farming and the use of their agricultural tools for raising barley, wheat, peas, potatoes, etc., from the Chinese. However, livestock still plays an important role as the second inportant economic resource. While sheep, cows, mules, and pigs are economically important, horses are bred only because to own horses is a mark of prestige.

The basic social and economic unit of the Monguors is the extended family which is patrilineally and patrilocally oriented. The grandfather and great-grandfather enjoy authority over all members of the family. Property is collectively owned.

The families belong to a clan which is headed by a chieftain whose Chinese title is T'u-ssu, who is at the same time a Chinese official. Originally the clan chieftain was simply the head of a number of extended families, whose migrations he directed and whose highest duty was the military protection of the clan through organization and training of the men. Later

133 sea-level, and it joins the Burchun plain on the east. The E-min River originates from this group.

The Dzungarian Basin: Dzungaria was the name derived from a Mongolian tribe who lived in this area for a long time. The basin covers the area from the fringes of the Burkan Plateau and the Burchun Plain at the north, the Ili Plain at the west, and the Cheng-hsi Basin to the south, along the piedmont of the Tien-shan. The basin is triangular in shape. The Altai runs from northwest to southeast, so that the east side of the basin is relatively higher than the west side. The surface elevation of the eastern part of the basin is around 1,500 feet, whereas, on the western part, it is only 600 feet in height. All the rivers run from east to west.

The Tien-shan Region: As the Tien-shan range runs from west to east, it separates the province into two sections - southern Sinkiang and northern Sinkiang. The range has been structured by numerous fault blocks; there are many horsts and grabens along both sides of the mountains. Moreover, they vary considerably in height and width and everywhere constitute a strongly marked dividing line between the great basin and the regions to the north. These comprise the wide plateaus of Dzungaria, stretching north to the fringe of the basin with a few well-irrigated, but isolated, areas and fertile plains and valleys. They do not, however, form any regular system and pattern. Since there is adequate moisture, [241] agriculture is to be found both in the valleys and on the plains, especially in the Ili Valley and on the Fou-kang Plain. Farther north on the northern slope of the ranges, grazing land is found. It has, at all times, attracted waves of nomadic nations, from the Huns to the Kazakhs and the Mongols. The continuity of its rampart, the Tien-shan range, offers opportunities to [489] nomadic neighbors on the north for plundering the oases and and trade routes in the south, since the mountain rampart is pierced at intervals by passes which are passable for mounted men and transport during a considerable portion of the year. To the southwest of the Turfan depression the wide valley of Karashahr descends from the grazing plateaus of Yulduz. It always has served as an open gate for nomadic inroads in the northwestern corner of the Tarim Basin. Farther to the west, under corresponding conditions, the great oases of Kucha and Kashgar are equally liable to attack across the Tienshan. The Tien-shan Region is the most important division in the province, because it occupies almost one-fourth of the provincial territory and there are many major cities and oases located on both sides of the ranges.

The Tarim Basin: This is the huge desert area between the

S 132 places not even as much as 4.5 millimeters falls through the year. There are no longer a series of records showing either the temperature or the precipitation of the area, but the available data show that the total precipitation consists of snow water as well as summer rain in certain parts of the province.

N 132 In the geographical distribution of rainfall there shows a marked contrast between the shady side of the mountainous areas and the oases. On the whole, the southeastern part of Kansu and Shensi receive a relatively greater rainfall than the northwestern sections. For instance, Wu-wei district, in the southeastern section of Kansu, has a comparatively high precipitation, and Chiu-ch'uan, because of its location in the northwestern section of Kansu, has a precipitation that N [241] is relatively low. The former is considered an area of agricultural dominance; the latter, due to less precipitation, makes for agricultural uncertainty.

Because the warmer southern air has been blocked by the Nan-shan and Chin-ling on the southern border of the region, the temperature of Kansu and Shensi is relatively lower than those places in the same latitude in eastern China. For instance, the January temperature in Peking is minus 4.7 degrees Centigrade; in Chiu-ch'uan it is about minus nine degrees Centigrade. In July the temperature in Peking is 25.3 degrees Centigrade, whereas in Chiu-ch'uan it is 23.8 degrees Centigrade. This is due not only to the influence of location - one near the coast and the other inland - but also to the fact that the mountain range runs from west to east as the barrier which shuts off the warm, moist winds from the southeastern coastal areas of China.

S 132 Furthermore, the distribution of precipitation of Sinkiang differs from south to north of the Province. The mean annual precipitation at Kashgar is 89.4 millimeters of which over two thirds, or around seventy three percent, falls in the spring and summer. At Urumchi it is 228.8 millimeters, of which twenty-four percent falls in winter; thirty-four percent falls in spring; fifteen percent falls in summer; and twenty-seven percent falls in autumn. At Kashgar the precipitation is greatest in summer and at Urumchi it falls largely in the spring and autumn months. The Takla Makan desert absorbs the limited moisture from the air. However, in northern Sinkiang the topographical features are comparatively open so that the Arctic Oceanic winds blow toward the area more easily. Thus precipitation is evenly distributed throughout the year.

S [241] The dry air reduces cloudiness and thus increases sunshine. The agricultural activities of the area depend largely upon the brilliant sunshine for melting snow on the mountains for irrigation.

563 2. Physical characteristics

142 Racially they are described as Europoids of the Dinaric sub-
[144] division. They have long, small faces with prominent and convex noses, and their skulls in most cases show occipital bulges. Their bodies are slender. Their hair is brown or black, but, in a few cases, also blonde. Their eyes are usually brown, but not as dark as the eyes of the neighbouring Kirghiz.

563 3. History and economic activities

The Tajiks have lived in this area for over two thousand years. Their predecessors were the Iranian people who spoke the Saka
[186] language. Between the Tajiks and the Turks an excellent relationship prevails, but there is an old animosity between the Tajiks and the Chinese.

[241] Due partly to their skilled irrigation system, the Tajiks cultivate oats, vegetables and barley with great success.

B. The Russians

The Russians living in Sinkiang can be divided into three groups. The first group consists of those merchants who maintained trade with the cities of Sinkiang for more than a hundred years and who usually lived in Chuguchak, Kuldja, Kashgar and Urumchi. The
[167] second group consists of refugees who fled Russia after 1918 and became technical laborers, chauffeurs, electricians, miners, road
563 constructors and so on. The third group consists of those Russians
648 whom the Soviets sent to Sinkiang for political reasons. They maintained Soviet Consulates in all the major cities of Sinkiang and had a very numerous staff. Soviet propaganda had a remarkable influence between 1920 and 1949. According to recent reports of Turkish refugees, the Russians still have military detachments in Sinkiang.

/The New Uighurs/

563 The Sinkiang nomad must buy his bride
[184] with a bride-price, but the sedentary Sinkiang bride is given
[583] away by her father. In addition he even pays all wedding ex-
[584] penses. Marriages are arranged by a "go-between", who usu-
[586] ally occupies a higher social position than either the bride or
[589] groom's families. As in all Moslem communities, divorce is a relative simple matter for the male. Therefore, a considerable number of women without family attachments are present in all Uighur communities. These unattached women are usually engaged in employment as tailors, cooks, or weavers, and thereby form a distinct social unit. As a rule they are identified with the household of their employer.

563 In general, all Uighurs are individualistic in character.
62 However, the structure of the community with its irrigational
182 problems gives them a collectivist outlook on life in parts.
[181] The families that form such an Uighur community are by no means bound together by kinship obligations. Their communal cooperation rests exclusively on the fact that without collective effort and labor the community would perish.

563 Prior to 1949, no organized youth groups existed in Uighur
[561] communities, since in any Islamic community the male child begins to participate in the activities centered around the mosque at a very early age. All other youth groups were discouraged. The young Uighur man becomes a full member of
[585] the community at the time of his marriage. He will receive
[885] title to any land or water rights only upon the decease of the eldest male member of his family. Until then both he and his wife work as members of the extended family group. A young merchant usually will act as his father's representative until the father's retirement from business affairs or his death.

563 Merchants are bound together in "guilds". However, these
441 associations are not official institutions but were natural outgrowths of the merchants' self-protecting interests. Should any member of the community be guilty of not paying his debts, he will be prosecuted by the members of such a "guild", even though he may have moved to another community. In each locality or city, the merchant's "guild" is organized under the leadership of an aqsaqal, who functions as a public official.

563 Individuals of the Uighur community who do not inherit any
166 land, move to non-irrigated areas which nevertheless show
241 possibilities of being irrigable. These new irrigation pro-
425 jects are usually undertaken as the collective effort of several families who move as a group to such a new area. This practice may explain population increases in Uighur occupied areas.

563 New industries and the further development of natural
178 resources may have some influence upon Uighur social structure, since these factors increase the wealth of both the

S 563 178 [31] S [464]

/The New Uighurs/

individual and the community. Natural resources to not seem to be of prime importance in Sinkiang. However, their exploitation through free or forced labor will further break down Uighur kinship ties and thereby alter the social structure. In recent times large numbers of non-Uighur laborers have been introduced into the area, further augmenting alien cultural elements.

S 563 438 622

Uighurs participating in small-scale home industries and handicrafts are organized under the leadership of a Chong-usta. Unlike the merchant's "guild" aqsaqal, he is not a public official.

S 563 554 [631] [647] [692]

Under the Manchu system the Büks (communal leaders) were classed in five degrees of rank, ranging from the third to the seventh degree of the Chinese official scale. 1. Ak'im Bük-local governor; 2. Ishkhan Bük -Assistant Governor; 3. Shang Bük - Collector of Revenue; 4. Katsanatch'i Bük - same as above; 5. 'Hatze Bük - Judge; 6. Mirabu Bük - Superintendent of Agriculture.

S [312]

As discussed previously, the Mirabu Bük was also the official having authority over water rights and water distribution. In practice the Manchu Amban, highest Manchu official in a given area, chose the Ak'im Bük who, in turn, chose his own subordinates.

S 563 241 554

Farm units were organized as follows: Ten such units were lead by an On-bashi, fifty by an Illik-bashi, one hundred by an Yüz-bashi. The duties of the Büks and Yüz-bashis mainly consisted of keeping and collecting registers and taxes. This governmental organization was abolished officially by the Chinese Revolution in 1911. However, traces of this structure are still found today.

S 563 668 177

The whole Uighur social structure certainly will undergo far-reaching changes under the Communist government. However, at this time only hypotheses about these changes can be advanced. As new cultural and political structures are imposed on the society, kinship ties will be further loosened. The Uighur communisty and its structure will take on new characteristics, as old institutions disappear and new ones are introduced. Except, perhaps, for the nuclear family, social groupings will be brought more and more into accordance with the new ideals of the society.

N *563 [592] [361]

B. The Sedentary Tibetans

Much that has been said about the nomadic Tibetans holds equally true for their sedentary counterparts. Again the basic unit is the group of families living together. In the sedentary community, the village may be composed of from a dozen to seventy, eighty or even more houses arranged adjacent to each other. The roofs of the normally two-storied buildings are close enough to form a pathway, and are used as such.

N [342]

C. The Kirghiz

563 1. The people

Taking Tien-shan as a whole, the Kirghiz form the leading [771] element of the population. They are Mohammedans of the Suni order, but they are not strict followers of their religion. Their [642] system of government is patriarchal, control of the different [622] sections being vested in tribal elders who enjoy almost unlimited authority. The elders (Manap) are chosen by the people, and regarded with honor and respect.

[233] The people are nomads whose main occupation is cattle rais- [241] ing. Only a small proportion of the population engages in farming.

563 2. Patterns of living

342 a. Dwelling

The Kirghiz do not live in houses. The poor live in shelters [184] made of branches under trees or against overhanging rocks. The rich live in tents, smaller and less ornate than the Mongolian yurt but more solid with thick layers of felt. A light tent is called an aq-ai. It stands a gale very well, as the shape is such that a high wind presses the structure even more firmly to the ground. To make it more stable, a large stone is placed in the tent and the woodwork of the roof is anchored to it by a rope.

The shape and structure of an aq-ai are similar to those of [354] the Mongolian yurt, but the interior arrangement differs. A fire always burns cheerily in the middle and a cauldron of mash [353] simmers upon it. At the far end is the kitchen, which is screened by gaily colored mats of reeds tightly wound with dyed wool. [251] Here the housewife stores her milk, cream and curds in vast wooden bowls. When the weather is wet, a row of young lambs [231] occupies one corner of the tent. They are tethered closely to a rope pegged down along the walls. Saddlebags, sieves, hats, [353] wool, coats, skins and so forth are hung along the tent walls. Piles of rolled-up felts and rugs occupy about a quarter of the circumference of the tent. The wealth of the owner may be guessed from the size of the piles.

563 The interior decoration in the tent of a wealthy Kirghiz is 342 often artistic. The walls are hung with embroideries made by 352 the women, and the ground is covered with carpets. There are 353 also pillows covered with multi-colored chintz of Chinese or Russian manufacture. Furniture is not generally used. There is [415] an occasional table, a few copper pots and pans, and some brass jugs used for boiling water and making tea.

563 b. Food

262 Staple foods for the Kirghiz are barley, bread, milk and its 252 products, such as sour cream and qurut, a kind of cheese. In most tents there are cauldrons of brewing mash, a mixture of flour and milk. Qurut is made by drying sour cream in goatskin.

/Western Mongols or Torguts/

As their forefathers had much contact with the Russians and the Chinese, they are more or less influenced by the culture and civilization of both. The Chinese influence appears to be the strongest.

Largely nomads, the West Mongols live a life similar to that of their nomad brothers of Inner Mongolia. Only as a last resort do they abandon tent life and take up agriculture.

The nobles who live in cities dwell in houses that are a combination of Tibetan and Occidental architectural style, flat-roofed, whitewashed, and with walled-in courtyards. Like the Chinese, they sleep on k'angs. One often finds Russian furniture in the house, Chinese embroideries decorating the walls, and red silk draperies with Mongolian mottoes.

The ordinary people wear long gowns of Chinese cut, but the customary Mongolian sash and equipment (see clothing section of IMAR Handbook). A young man wears a long gown with a sleeveless velvet waistcoat on top. Formerly, the officials wore silk robes of Chinese cut, and the decorative cap of Imperial times with a peacock feather to signify the position of chieftainship. Nowadays they wear a Chinese style long gown with a sleeved jacket (ma-kua).

Food of the West Mongols is similar to that of other nomadic peoples, but when the rich entertain, the cuisine is a combination of Mongolian, Chinese and Russian styles.

An April 18, 1955, despatch reports: "The People's Liberation Army in Sinkiang has started spring sowing on the plains north and south of the T'ien-shan Mountains. Crops already sown include spring wheat, oil-bearing plants and long staple cotton. The army men are experimenting with the cultivation of long staple cotton in the Turfan Basin, where favorable conditions exist. This year the PLA farming units will cultivate over 66,000 hectares, or thirteen percent more than last year. More than half of the land will be ploughed by tractors. Adequate supplies of chemical fertilizer and insecticides are on hand."

A June 3, 1955, despatch reports: "The largest reservoir in Sinkiang is being enlarged this month by engineering units of the People's Liberation Army stationed in Sinkiang. When completed, the Men-chin reservoir, north of Urumchi, will have a storage capacity of sixty million cubic meters of water which can be used for irrigation."

An October 31, 1955 despatch reports: "A leading part has been played by the People's Liberation Army in irrigation works in Sinkiang. With their help, the peasants have constructed nine reservoirs, repaired irrigation canals and ditches, totalling 30,000 kilometers in length, built hundreds of new canals and added more subterranean waterways, a form of irrigation traditionally used in the region. In addition, the People's Liberation Army units have built and expanded works capable of irrigating 200,000 hectares, mostly farmed by local peasants. The army men also reclaimed over 73,000 hectares of wasteland and set up twenty-nine mechanized state farms."

A November 3, 1955, despatch reports: "Manass Basin Agricultural Production Construction Troops of Sinkiang Military District of the People's Liberation Army plan to grow cotton in an area of 202,000 mou next year, one hundred forty-six percent larger than this year. These troops are now actively undertaking the preparatory works."

A December 24, 1955, despatch reports: "A new mechanized farm has been built in the Manass Basin by PLA. It has some 10,000 hectares of well irrigated farmland, part of which has already been sown in winter wheat. They plan to supply the state with nine thousand tons of grain and twenty-eight hundred tons of cotton next year."

The constitution of the so-called People's Liberation Army in Sinkiang has not been disclosed. But to use the regular army as a labor force in peace time is, to say the least, forced labor in disguise. (See section Forced Labor of General Handbook).

III. Conscript Labor

000 oases. A trade road, looping around the desert, links the oases
133 like beads on a string, forming a U with the open end toward the
491 east.

131 Dsungaria is in northern Sinkiang, between the Tienshan and the Altai mountains which mark the frontier between Sinkiang and
132 Western Mongolia. Precipitation here is slightly higher, and
137 steppe vegetation makes pastoralism possible. Northern Dsungaria
233 was the avenue of migration followed by the Mongols in their west-
[489] ward conquests.

2. Pastoral nomadism

233 In 1943, there were 11,720,000 sheep and goats in Sinkiang, 1,550,000 cattle, 870,000 horses, and 90,000 camels, totalling 14,230,000. In 1947 the province reported 12,266,000 sheep and goats, 1,659,000 cattle, 1,027,000 horses, and 85,000 camels, a total of 15,037,000. The total has remained somewhat constant over a period of time, probably due to the fact that pasture land is poor and care of the herds inadequate. Most of the livestock are in Dsungaria, pastured in the steppe land by nomad Kazakhs or Mongols. There are many variations to the techniques of herding animals since cattle, horses, and camels each prosper best on different kinds of pasture. The problem is to devise the best combinations of animals to be maintained and to select the appropriate pasture, decide how long to remain on a pasture, when to move, and how.

3. Oasis agriculture

241 There are two kinds of oases in Sinkiang: those in the south,
312 which are sharply isolated from each other by desert stretches and the oases of the north, which have fringes of land in which rainfall farming prevails. When irrigation was introduced, it seems to have been practiced first on the lower courses of the rivers, where the soil was soft and the engineering problems required only the digging of simple ditches from the banks of the streams. In the course of time, as knowledge of engineering developed, the tendency was for the oasis to move upstream toward the boulder slopes at the edge of the foothills, but not back into the gorges where the problems were far too great.

Oasis engineering is extremely simple. The basic pattern is a main canal from the river, branching into smaller canals which branch in turn into ditches which deliver water to the fields, all arranged so that water flows by gravity from level to level, without the pumping or bailing devices which are widely used in China and in Soviet Turkestan to lift water from lower to higher levels.

[133] In volume of discharge, the rivers of the Tarim system are far behind the two great rivers of Soviet Inner Asia, the Syr Darya and the Amu Darya. The total discharge of all streams in Sinkiang is about 3400 cubic meters per second, of which about seventy per cent is in the Tarim Basin. In irrigation engineering

241 312 it is calculated that a discharge of one cubic meter per second should irrigate over 6,000 acres, whereas in Sinkiang the figure is estimated at 2,530 acres. There is a lack of drainage to provide for washing out the salt deposited by irrigation and of storage lakes and reservoirs and even small scale tanks. As a result, it is estimated that from a third to a half of the potential supply runs to waste.

One of the most important irrigation practices is the käriz or qanats, a gently sloping tunnel which leads along the axis of an alluvial fan, bringing ground water for irrigation from the upper slope to the surface lower down. The slope of the käriz is somewhat more gentle than that of the fan, and the käriz may be miles in length. A line of wells is dug at intervals and connected at the bottom by a continuous tunnel, three or four feet in diameter. Near the mountains, the käriz may be fifty feet below the surface. As the foot of the slope is reached, the shafts are more shallow, until at last the water emerges into the open air. In this way, ground water at the base of the mountains is tapped and brought to the surface of the plain. When the tunnel caves in or fills with sediment, a distant oasis may need to be abandoned.

241 312 471 454 The construction of käriz involves a heavy capital expense. Some forty years ago, Aurel Stein estimated the cost of a single long käriz in Turfan at over 300 pounds. The risk of failing to find water deters peasants from joining together to dig a käriz, and construction is usually undertaken by wealthy landlords who hire labor. Their reward, when successful, is a monopoly of the water, which they sell to the peasants in return for a share of the harvest. This form of enterprise is so profitable that some landlords sell all their land and invest entirely in käriz.

312 241 Springs and subterranean flows are supplementary sources of water in some oases. Small pits are used for storage of drinking water in some oasis towns. If these reservoirs are silted and new ones not constructed, the oasis will sooner or later have to be abandoned.

311 312 241 The farms surround the oasis, and the utilization of land is determined by the proximity of irrigated land to the middle of the oasis. Land nearest the market places for farm produce receive most of the fertilizer, in the form of night soil, and intensive garden cultivation of vegetables and fruits is practical on this land. Within this zone some cash crops such as apricots and other fruit are usually grown for the market. Beyond this inner area, the amount of fertilizer applied decreases rapidly. Two other zones follow where practically no fertilizer is used and hardier crops such as millet, kaoliang, and potatoes are planted. This land must be fallowed. Beyond this zone there is usually no water and the desert begins abruptly. The fringe area may sometimes be used for grazing, particularly of sheep.

161 About two-thirds of the total area of Sinkiang is uninhabited.
311 In 1946 the number of farm households was 344,000 and the average
number of acres per farm was around 7.1. (Creesey, Land of the
[114] 500 Million, p. 105. This figure, according to other sources,
is rather high.. These sources give a figure of from 0.5 to three
acres per farm.) The total amount of cultivated land was 2,455,000
acres or roughly one per cent of the total acreage of the region.
The greatest concentration of population is south of the Tienshan,
or more precisely, in the southwestern corner of the province near
the Soviet border. These are the districts of Khotan, Aksu, and
Yarkand which contain over two-thirds of the population of the
whole province. North of the Tienshan, the greatest concentra-
tion is in the Ili valley.

243 According to the figures supplied by Owen Lattimore, the
433 annual wheat crop of Sinkiang before the Communist conquest was
about 253,000 tons, about forty-four per cent of the total crop of
grain, beans, and seeds. Corn reached 331,000 tons or twenty-
eight per cent. Rice was about 71,000 tons or six per cent, and
sesame, rapeseed, and linseed accounted for 71,000 tons or six
[244] per cent. Barley, kaoliang, sorghum millet, beets, and peas
amounted to 119,000 tons or ten per cent. Millet, soybean, and
green beans totalled 71,000 tons or six per cent. Total agricultural
output was 916,000 tons. (Pivot of Asia, p. 167.)

243 Winter wheat is grown north of the Tienshan where, in spite
of the cold, the seeds are protected by the cover of snow; only
spring wheat can be grown south of the Tienshan, where lack of
snow cover exposes the seed to being frozen in the ground. Wheat
is tending to be displaced by rice in oasis fields because the fields
are highly alkaline. But the yield of rice is lower than that of
corn, because the Uighur farmers do not transplant the young rice
[461] shoots as Chinese farmers do. Although the amount of labor
[433] expended on a unit of land is about the same in Sinkiang as in
China Proper, the yield is somewhat less.

248 Cotton is the most important commercial crop in Sinkiang.
It was grown in Turfan as early as the T'ang Dynasty (618 -
907). Two varieties are raised: the native and the American.
In 1943, 100,000 acres of cotton were planted, seventy-three
per cent with native cotton and twenty-three per cent with seed
288 of the American varieties. Silk is also an ancient crop of com-
433 mercial importance. Its production reached 350,000 kg. in 1942
but fell drastically to 100,000 kg. in 1943.

592 The family group, living together under one roof, is the basic
241 producing unit in oasis agriculture. It often includes married
children, which makes it slightly larger than the average farm
family in China. While farms in the Tarim Basin average from
[423] 4.5 to six acres in size, larger than the 3.5 acres given for China
Proper, because the family in Sinkiang is larger, there is only

1: Washington S-4 (no date) 1956 AF13 Northwest China AF13
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S 592 241 423 0.58 acres per capita as against 0.68 in China Proper. It is difficult to obtain a picture of the land tenure system because of the lack of data. But according to a field survey referred to by Owen Lattimore covering sixty-five households in two villages in the Khotan oasis, the smallest farm was 1.08 acres and the largest farm was eight acres. A further breakdown revealed that S [184] rich peasants in this group had average holdings of eleven acres, middle peasant 5.7, and the poor peasants 2.8 acres. In the area where this survey was conducted, it seems that the farms of the poor were too small for the efficient use of draft animals and there was the problem of efficiently employing, on a tiny farm, the labor potential of the large Uighur family. (Pivot of Asia, p. 169.)

S 311 313 4. Forestry

There is forest land in the rich Ili valley but it is questionable whether much timber can be exploited without serious damage to the soil. Since much of Sinkiang is desert and wasteland there are few forest reserves; out of the total Sinkiang area only about five per cent is forest land.

C. Kansu, Shensi, Ninghsia, and Chinghai

N 133 134 [243] 1. The setting

J. L. Buck refers to this part of the Northwest as the spring wheat and winter wheat-millet area. In the spring wheat area (northern Kansu, Ninghsia, and Shensi) high hills, small mountains, and narrow irrigated valleys characterize the best agricultural land. But along the great wall in Shensi, Ninghsia and Kansu are many undulating sand dunes extending from ten to seventy miles both northward and southward. When the Mongols occupied this region, these dunes were covered with grass and shrubs, but where the Chinese settled here, they cultivated the slightly more fertile land in the depressions between the dunes; once the grass was destroyed the winds blew the sand so as to make farming impossible and other nearby good soil was covered with the blowing sand. Grass in such land can seldom be resodded, and it is thus that land once useful, at least for pasture, is now entirely destroyed.

N 133 134 243 The winter wheat-millet area (southern Kansu, Ninghsia, and Shensi) extends over a great part of a loess-covered plateau, a high, dissected peneplain, carved largely from red or purple sholes and conglomerates, covered with deposits, largely lacustrine, and blanketed by wind-blown dust, known as loess, which varies in thickness from about twenty to more than 150 meters. The fields in this region are very irregular and small, and most of the surface is so eroded that cultivation is difficult and much terracing is necessary.

N 132 The climate is cold, dry, and windy in winter. The typical precipitation is low, about fourteen inches, and exceedingly

N
241 ning in agriculture has become more complex and difficulties are
*668 encountered in realizing annual targets. The absence of trained technicians to introduce new farming techniques, the lack of accountants and organizers in the cooperatives, and the so-called
N ideological backwardness of many of the Communist cadres them-
121 selves have prevented rapid cooperativization. We will now exa-
241 mine very briefly the progress achieved in the different regions
*668 of the North.west and the problems which have arisen to prevent agricultural development. In this way, the pattern of Chinese Communist agricultural planning can be observed more clearly. Henceforth, all statistics concerning the number of co-ops, agricultural output, etc., are Communist claims and, of course, must be carefully considered.

B. Application of Communist Agricultural Policy to the Northwest

S
175 1. Sinkiang

474 By June, 1955, nearly six years after the area was occupied
• 241 by the Communist Army, there were 75,215 mutual aid teams
668 (it is not known how many of these were on a permanent basis)
[476] and the agricultural producer cooperative numbered 1,702 with roughly 66.4 per cent of the peasant population participating in some form of co-op. By the end of 1956, in response to Mao's directive to hasten the creation of agricultural producer cooperatives, it is planned to increase their number to 5,100 and by 1957 to 10,240. (Far Eastern Economic Review. December 1, 1955, pp. 686-87.)

S
241 Emphasis has been on raising the production of wheat, oil
433 seed bearing plants, and cotton, by extending cultivation. The
668 Communists attribute all increases in production to a result of
175 further consolidation and development of the cooperative move-
[474] ment. Although there is a paucity of data on output, acreage, and output per acre, the following table has been pieced together from the information available, in an attempt to give some comparisons of increases attained during the Communist period with that of 1949. The figures for the Communist period have been obtained from 1954 and 1955 reports. See Table 1.

S
242 The government has established agricultural stations, in
668 order to show the peasants of various nationalities how to improve
433 their farming methods. In 1955 it was reported that Sinkiang
175 had seventy such stations. Two tractor stations have also been opened in Urumchi and Sui-ting. These stations have sought to improve production by planting Ukrainian winter wheat and S-3173 cotton, and promote better procedures of farming such as summer ploughing, autumn ploughing, winter irrigation, sowing in rows, close-planting, and cotton-pruning. They have made efforts to wipe out insect pests. The Soviet Union sent

175
242 The Soviet Union sent
668 thirty-three airplanes and large numbers of locust experts to
433 spray insecticides over an area of some 2,669,000 mow (or
[177] 405,688 acres) during 1952-1955. On the state farms, the Army
[475] has done the lion's share of the work of reclaiming land, building
[701] irrigation works, erecting experimental farms and stations and operating them. (Union Research Service, Oct. 14, 1955. p. 7, No. 9.)

654 The Communists reported that they have given financial and
668 technical assistance to the various nationalities who till the soil
241 or engage in pastoral activities. By the end of 1954, agricultural
175 loans totalling some 26,140,000 yuan (U.S. $1,061) and some 46,000 farming implements had been supplied to the peasants, enabling every peasant household to have one trowel of its own and every 1.3 households to own a plow. These small figures indicate that assistance has been meagre; but even this might enable the peasants to increase output as compared to output obtained by previous farming implements.

241 Whether agriculture will prosper in Sinkiang depends entirely
312 on the steps taken in water conservancy and the proper utilization
668 of water. Already five million additional mow of land (160,000
175 acres) have been irrigated in the past six years and the irrigated acreage in 1954 has been increased by 30.2 per cent since 1949. Reservoirs have been constructed like the well-known "Red Wild Goose Reservoir" and the "Peace Reservoir" which both now irrigate more than 237,000 mow (36,024 acres of land). Three
[475] state farms, collective farms, and a dozen or so agricultural co-
[474] ops have been formed in the area.

231 By the end of 1954, the total number of livestock in the whole
433 province numbered 17,105,000 head, an increase of 7.47 per cent
175 over 1953. (In 1947 the total number of livestock was 15,037,000.
668 The figure reported for 1954 indicates a 13 per cent increase.) The plan for 1955 is to raise the number fo 18,987,567 head, a net increase of 11 per cent. This will include 537,280 head of large and small animals of improved breed (including 515,792 sheep, 7,930 large domestic animals, 13,538 pigs); 2,839,140 head of livestock will be innoculated against or cured of various diseases. The Chinese Communists complain, however, of many defects in animal husbandry. During the past winters, insufficient feed was gathered and many animals died. It was estimated that some 200,000 died in the spring of 1954, an approximate loss of one per cent per annum.

313 The forestry policy has been to protect existent forests from
668 fire and damage, to survey forest areas suitable for afforestation, to plant saplings there, and to afforestate areas near rural villages for the development of co-ops and state farms. Each year, the quota mou to be afforestated is set and state departments undertake to meet these quotas. Nurseries have been built and seedlings planted in these tracts.

000 planted in these tracts.

668 185 241 We have cited some of the achievements that have taken place and the general direction of agricultural development. We must be careful about accepting all figures and recognize that many targets are not met but often revised midway through the year until they can be met. When one looks at the entire scheme of development taking place it is important to remember that each group in this scheme has certain commitments to meet as set by the plan for that year. Survey teams are supposed to provide definite information about the amount of land to be reclaimed each year. If their information is not accurate, (and there have been complaints to this effect) then those units which reclaim the land are put off schedule, the proper cultivation and sowing cannot be done, and the intended output is not realized. Such intricate planning can lead to grievous bottlenecks in the attainment of planned goals.

Further defects that have been reported are as follows: there has been inadequate hydrographic and meteorological data for farming and animal husbandry. There has not been the correct coordinated activity between State and commercial enterprises to supply the necessary producer and consumer goods for the agricultural and pastoral co-ops. The People's Bank has been [452] [453] unable to give the needed credit and credit cooperatives and credit groups still have to absorb idle capital and halt usurious practices among the peasants, which still seem to prevail six years after "liberation." The Communists report that rich peasants, and so-called counter-revolutionary elements are still causing trouble by "sabotage" and the spreading of rumors which obstruct Communist policy.

According to observations made by some agricultural stations in Sha-ya County the peasants in many districts placed emphasis only on the summer harvest, and neglected the cotton, mazie and rice crops that are reaped in autumn. This meant that the peasants were devoting more of their attention to harvesting a wheat crop, a food item, and neglecting other farm crops that the state was so urgently emphasizing. In Kuerhlei County there were complaints that the peasants were not picking the cotton at the appropriate time and their delay in doing so had allowed much of the ripe cotton to fall to the ground and rot. This occurred in many of the villages throughout the county. Again the Communists complained of the peasants' lack of care for their farming tools and that damage frequently resulted from mechanical troubles and carelessness.

668 241 The principal difficulty to date has been the acute shortage of technical cadres in the province and among the local minority nationalities. To solve this problem, several agricultural institutes have been erected to train indigenous groups. But this

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668 training takes time before these technicians, accountants, etc.,
• 241 can go out and organize co-ops, operate them efficiently, and train other native cadres. The 1955 plan calls for the training of 600 technical cadres for the "Centers for Promoting Agricultural Techniques," for the training of 500 in-office cadres by rotation, and for the training of 4,190 accountants and 5,337 technicians for agricultural producer cooperatives.

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668 An additional problem (which will be mentioned at this point
657 rather than repeated when each province of the Northwest is dis-
736 cussed) concerns the soldiers' dependents in the region and the
474 plight of discharged army personnel. The State has been particu-
729 larly upset by the lack of participation of these groups in coopera-
[464] tivization and special attention is now being devoted to utilize this source of manpower. Since dependents of servicement are given certain State stipends, in food, many of them feel that by joining a cooperative they will be deprived of this compensation. Because 1955 was a critical year in the Five Year Plan, the pace of erecting new co-ops and consolidating the older ones has been increased. Now many of the dependents and demobilized soldiers who were organized in these co-ops have backed out of them and many of these co-ops have, therefore, never been consolidated. Another problem in the co-ops is that the members do not want partly disabled or female workers, and, on the other hand, many dependents feel that the State should provide for them. (No. 1004, March 10, 1955, Supplements. "Actively Organizing Servicemen's Dependents for Mutual Aid and Co-op Work." U.S. Consulate General. Survey of China Mainland Press.) The proper allocation of labor in the Northwest remains a critical problem.

2. Chinghai

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* 175 By December, 1954, 575 agricultural producer co-ops had
* 668 been formed, and this constituted 9.12 per cent of all households.
474 The number of mutual aid co-ops was not given but it was reported
452 that 69.7 per cent of all households had been cooperativized to
[476] some extent. There were also 159 supply and marketing coopera-tives, 148 credit cooperatives, and 12 handicraft producer co-ops. Long term low interest loans have been extended to poor peasants to encourage them to join farming co-ops. The first allocation totalled over 138 million yuan (U.S. $5,598). The interest rate is 0.4 per cent monthly and the repayment period is spread over five years. Besides these individual loans to poor peasants, there have been additional ones to enable the peasants to build small water conservancy works and buy new types of farm tools. All totalled, state loans amounted to more than 750 million yuan (U.S. $30,426) for 1955. (Far Eastern Economic Review. Dec. 1, 1955. pp. 686-87.)

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* 668 In a provincial report by Chan Kuo-sheng, Secretary General
241 of the Chinghai Provincial People's Government, on work
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Hami is by far the largest and most fertile oasis through which we had passed. For six miles before we sighted the town we were travelling in highly-cultivated land, abundantly watered, and between fields of wheat, cotton, millet, maize and sorgum. Approaching the town we passed through a fine avenue of trees; the sky overhead was cloudless, and in the background the snow-peaks of the Karlik Tagh Range glittered in the sunshine. At that moment a group of girls in long scarlet dresses and flowing white veils came running down the road chasing a herd of unruly donkeys. They gave the last touch to a brilliant scene of prosperity and riotous colour.

CHAPTER XXXVI

THE WONDERFUL CITY OF HAMI

THE beauties of Hami exceeded all our expectations, high as these had been. The inn in which we stayed was situated in the large, unwalled, commercial area of the town, and the landlord was a wealthy Moslem Turki. When our drivers turned into the spacious, open courtyard bordered with well-kept flower-beds, and surrounded by rows of well-built rooms, we could scarcely credit that this was the 'inn' of which Mr. Hunter had spoken so modestly. A suite of three rooms, communicating by inner doors, was allotted us, and we found that we were the first tenants to occupy them. The windows were newly papered, and with a fresh, clean matting on the *kang* all was spotlessly clean. There was no stabling provided, however, so after unlading, our drivers, carts, and mules departed to another inn of a more ordinary type. We had the

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conditions of life in a new country, and though living in easy intercourse with the Turki people, which is a virile and stubborn race, yet retain their own customs and traditions with remarkable tenacity.

During our residence in Kansu we had become familiar with the Tungan—called by the Chinese 'Huei Huei'—and in Turkestan they abounded. Their origin is very debatable, and a stranger on first seeing a Tungan youth would probably say: 'What a handsome Arab boy.' Their hair is never really black, their features are aquiline, and the men generally wear a short, curly, brown beard. They are tenacious Moslems in the matter of neither eating pork nor drinking spirits, and they seldom touch opium. They were the leaders in the Moslem rebellion of 1862.[1]

The Turki—called by the Chinese 'Chantow'—is the agriculturalist of Central Asia. Whereas the Tungan speaks Chinese, the Turki has his own tongue—a language which has excited the interest of philologists by its regularity and intelligent structure. Professor Max Müller said: 'No society of learned men could have devised what the mind of man produced, left to itself in the steppes of Tartary, and guided only by its innate laws or by an instinctive power as wonderful as any within the realm of nature.' To quote an oriental saying:

'Arabic is science, Persian is sugar,
Hindi is salt, Turki is art.'

The Mongol is also a familiar figure on this northern road. His rough, good-natured, flat face and simple childish manner lend him the same attraction as that exercised by the Tibetan. He bears the stamp of the nomad and his means of livelihood are ranching and cattle-stealing. He always carries a knife at his belt,

[1] This insurrection covered the period from 1862-1877.

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lighted, as the most sure means of keeping unwelcome guests at bay. The tins of Keating's powder, which we had on order, had failed us with the other stores, but even had we secured them, nothing can finally circumvent these insects, which creep along the rafters and drop from the ceiling on to the hapless victim beneath! We were soon fast asleep, but at dawn a still worse plague faced us, for the walls were black with loathsome flies, and not one moment's peace did we know throughout our Sabbath rest in Muleiho.

The little town was in the proud position of having been lately raised to the civic status of a '*hsien*' city, in consequence of which it now had its own Resident Civil Magistrate, whose new Yamen had just been erected.

A wooden bridge spanned the wide river which rushed by the city wall, and here the inhabitants were wont to gather in the cool of the day, at the hour when all the animals of the city were led down to be watered.

The arable land was extensive and splendidly irrigated, and there was every sign of prosperity. Strings of little donkeys, driven by Turki vendors, constantly passed our inn door laden with baskets of grapes from Turfan. The large black and white grapes were not yet ripe, but the small seedless variety was plentiful and cheap. This is the kind from which the Turfan sultana is produced in such abundance.

A band of children, with whom we made friends, took us up to a court in the Yamen buildings to see a red deer, which had been caught young in the mountains and was being reared in captivity. Its antlers were particularly fine, and we noticed that all the medicine shops of Muleiho were decorated with splendid specimens of such antlers, which are highly valued for medicinal purposes.

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feature. The first night after Kucheng we slept at Tsimusa—'The City of Everlasting Trust'—and seeing a military guard at the gate we knew that an officer would shortly call for our passports. On this occasion, however, the innkeeper failed to inform the authorities of the arrival of foreigners, and when the soldiers came to demand our papers they were exceedingly angry, and threatened him with a beating if he neglected this part of his duty again. The upshot of the fuss was that the innkeeper spent the whole night in raging and cursing officials, foreigners, passports, and soldiers alike, vowing that no 'foreign devil' should again darken his doors! To judge by the experience of this and other journeys in Kansu and Turkestan, it is of the greatest importance that travellers' passports should be in strict order, and up-to-date. We were required to produce these documents at the most unlikely places, and sometimes they were examined both on entering and on leaving a city, as well as at the Yamen. We were thankful to quit the 'Inn of the Cursing Landlord' at 5 a.m. and proceed on our journey towards Santai—'The Third Stage.' The road took us for seventy *li* over grassy steppes, and for the last fifteen *li* we drove by rapid streams between fields of maize and sorgum, bordered by hedges and shaded by overhanging trees. The whole scene, apart from the nature of the crops, might have been an English rural landscape, and it warmed our hearts as we thought of the pleasures of soon wandering in English lanes and fields.

We were feeling the fatigue of our long journey much more severely now that we were enduring the added strain of great heat, and though the night stages were at an end, such a diary entry as: 'Rose at 2-30 a.m. and took a very heavy, hot stage,' speaks for itself. The carters also were suffering from the prolonged

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sleeping accommodation to be had, we contented ourselves with our cart. Some time before dawn the yard was astir. Every carter threw a measure of grain into his animal's trough, watered the beasts, then called to the landlord to settle the account, which transaction was always accompanied by squabbling and cursing, but not until the required amount was handed over did the big double doors open, and allow the carts to pass out. We, too, were up early, and for breakfast had the unaccustomed luxury of a bowl of warm milk which an old Chantow ladled out from a brass pot, in which it was kept hot over a brazier.

We were now entering the district known as 'Fly Land,' a name which speaks for itself, and from this time until we reached the higher and more arid land near Chuguchak, our meals were made revolting by these loathsome pests, which also made rest or sleep by day impossible. Knowing this, we had brought lengths of mosquito netting with which all our food was covered and in which we wrapped our provisions, but still the table was a black, moving mass of winged horrors. Soon after midday we were at Hutupi—a thirty-mile stage—which we accomplished with great ease. The range of the Tian Shan, culminating in the glistening Bogdo, made a most striking background, and the land around the villages was very fertile, producing good crops of millet, wheat and sorgum. At the Moslem inn where we stayed, all the best rooms were occupied by the family of the innkeeper himself, but we always had access to the harem, and through the womens' court a little back door took us straight out into fields near running water, where we enjoyed space and some coolness. The lane at the back of the house was also the connecting link with the back-door of every house on the north side of the village, and

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As soon as we appeared women and girls emerged on every side and sat down with us, forming a gay picture with their brightly coloured dresses and white veils thrown up against the green cornfields behind.

The Moslem women are intelligent, but are only viewed as providing temporary gratification to their husbands, who take them into favour or thrust them aside at pleasure, even divorcing them or bringing fresh wives to the home on the slightest provocation. The concentrated contempt and hatred of a lifetime were stamped on the face of one discarded woman, who, at the mention of her husband, drew herself up, and said: 'Men! they are not men, they are beasts!' The tragedy of the Moslem woman's life makes the opportunity for the Christian woman missionary to present the Gospel of spiritual liberation which she preaches.

Our daily meals consisted of tea and bread in the grey dawn before starting, but on the longest stages we now always found a halfway house where we could sometimes buy hard-boiled eggs; the real meal of the day, however, was made when our march was completed, and into our own little iron pot we put a piece of meat and some vegetables, which we boiled together, ladled out the soup, and divided the meat, Nimga being always ready to finish what remained! The following day we had a long stage of fifty miles, but our driver kept his beasts well fed, and they took the road in fine style, accomplishing the journey in nine and a half hours. The town of Manas which we reached that evening, though a busy market-centre, gives the traveller no idea of the size of the agricultural district which surrounds it. Here is the richest and best watered farming country to be found within range of Urumchi on the north. Its population is almost wholly occupied in farming, and wheat, rice, maize,

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vegetables and fruit, especially grapes and apples, find a ready market in the capital. The grapes were the largest we had ever seen, and we carried in the cart an abundant supply which more than made up for the lightening of our load by the bread we had consumed! We were now only a few miles from the Manas River, which is the most important stream in this part of Turkestan. Its source is in the Celestial Mountains, but it finally loses itself in the sand. A little earlier in the season, when the snows were melting, the Manas River is often impassable, and a Chinese lady friend had a few weeks earlier been upset into the water and nearly lost her life. We were now in the last days of August, and it was already cold in the heights of the Tian Shan, therefore we had no cause to fear the sudden treacherous rise of the water which comes from the melting snow, and we crossed without difficulty.

Our next stopping-place was Ulan-Usun—'Blue Water'—where we had the advantage of occupying the inn room which had been papered and swept for the use of the Governor's son, who had preceded us on his way to Zaisan. Fresh red paper with eulogistic phrases decorated the door frame; clean matting covered the *kang*, and the court had been generally tidied up in honour of such an important guest. The flies, however, still remained.

The country here was splendid grazing ground, covered with tall 'chi-chi' grass. The Mongolian nomads pitch their tents on this plain during the winter months, when the cold drives them down from the higher pastures.

Our driver, though a surly cross-grained fellow, was beginning to thaw under our constant friendly advances. His knowledge of Chinese was very poor, but the present of a bunch of grapes or a piece of new bread,